United States Department of Agriculture

Soil Conservation Service

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'Atlantic' coastal panicgrass



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'Atlantic' coastal panicgrass is useful for long-term stabilization of critical areas. It can be direct seeded on coastal sand dunes. It is well adapted to revegetating disturbed areas such as borrow and gravel pits, land and highway fills, and has additional value as a standup winter cover forwildlie. Atlantic has proven ability to persist and grows well on droughty, infertile soil materials

The original seed collection that led to the release of Atlantic was made at Back Bay Wildlife Refuge near Princess Anne, Va. It was cooperatively released by the Soil Conservation Service and the New Jersey Agricultural Experiment Station in 1981.

Description

Atlantic coastal panicgrass (*Panicum amarum* var. *amarulum*) is a tall, robust, warm-season, perennial grass Growth habit is upright and the plant looks like a bunch grass, although it produces short rhizomes. Plants are bluish green, leaiy, and multistemmed. They produce large quantities of viable seed. Strong seedling vigor is an outstanding attribute of Atlantic.



One-year-oldstand of Atlantic coastal panicgrass that was direct seeded on sand dunes

Adaptation

Atlantic coastal panicgrass grows best on light-textured, sandy to silt-loam soils. It is adapted to the coastal plain and the peidmont region from Massachusetts to Texas, and has proved to be winter hardy in areas where the average low temperature is between -10° and 0° F. (See adaptation map.)

Establishment

On sites where tillage equipment can be used, prepare a firm seedbed as for a pasture planting. In silty or medium-textured soils, plant seed 1/2 to 1 inch deep. In coarse-textured soils, plant seed 1 to 2 inches deep. On sand dunes. plant seed 2 inches deep. The number of seedlings appears to be related to whether the seed are buried deep enough, which is essential to establishment. Surface seeding on sand dunes will not produce successful stands. The recommended seeding rate for drilled plantings is 10 to 15 pounds per acre. Broadcast seedings can produce good stands only if the seed are adequately covered by cultipacking or other suitable means. The seeding rate for this method should be increased to 20 pounds per acre.



Atlantic coastal panicgrass in the spring after several winter snowfalls.

Sericea lespedera is recommended for seeding with Atlantic on all sites except sand dunes. Sericea is a deeprooted, long-lived legume that is well adapted to the same region as Atlantic. Because it is a legume that produces nitrogen for the coastal panicgrass, and grows to about the same height, the two make an excellent combination. The recommended rate of sericea is 20 pounds per acre.

Since coastal panicgrass seed may display some dormancy, the use of 2-year-old seed is recommended. In addition, early spring seeding will increase the rate and uniformity of germination

Most manmade critical sites are low in plant nutrients. Lime and fertilizer should be applied prior to seeding according to soil tests. If soil test results are not available, incorporate 2 tons of lime and apply100 pounds each of nitrogen, phosphorus, and potassium per acre when seeding the grass alone. When seeding with lespedera, use 50 pounds of nitrogen and 100 pounds each of phosphorus and potassium per acre. Lime is not recommended for seedings on sand dunes.

Mulch is recommended for broadcast seedings where depth of seed placement may be less than recommended. This is best accomplished by tacking down straw or hay at 2 tons per acre. Use o i mulch is not recommended on sand dunes.



Typical 2-year-old stand of Atlantic coastal panicgrass with ample fertilizer and moisture



Seed Production

Coastal panicgrass seed can be produced on almost any well-drained, tillable soil. To reduce weed competition, use a field that has been in cultivation for a few years.

Seeding should be done in the spring using a conventional grain drill or cultipacker seeder. Weeds can be controlled by using selected herbicides. Seed are easily direct combined and cleaned using standard procedures. Average seed production is about 250 pounds per acre



Availability

For more information on availability of seed, use, and seed production of Atlantic coastal panicgrass, contact your local SCS office listed in the telephone directory under U.S Government, U.S Department of Agriculture, Soil Conservation Service